

Section 6.3 Fuel Correction Factors for Cleaner-Burning Gasoline

This section discusses the Fuel Correction Factors related to cleaner-burning gasoline for all gasoline vehicles in EMFAC2000.

6.3.1 Introduction

As a part of overall program to reduce emissions from motor vehicles, State of California requires that all gasoline sold in the state must be California cleaner-burning gasoline. Cleaner-burning fuels were introduced in two phases: Phase I in 1992; and Phase II in 1996.

6.3.2 Methodology & Results

The change in emissions attributed to clean burning fuel, in the form of correction factors, are included in EMFAC2000. The fuel correction factors (FCF) are multiplied by the base emission rate, for each pollutant, in order to determine the effect of the fuel on emissions. FCF for phase I are same as in the previous version of the emissions inventory model (MVEI7G). Compared to MVEI7G, in EMFAC2000 FCF for phase II fuel in 1996 are revised to reflect the reductions estimated by stationary source division of the ARB. Stationary source division, lead division on fuels regulations, conducted several motor vehicle test programs to evaluate different fuels and estimated an overall reduction of 11% in HC, CO and NO_x emissions. Table 6.3.1 shows FCF used in EMFAC2000.

Table 6.3.1 Fuel Correction Factors (FCF) for Cleaner-Burning Gasoline

Cleaner-Burning Fuel	CY	MY	HC	CO	NO_x
Phase I	1992-1995 Summertime	All	0.988	0.994	0.997
	1992-1995 Wintertime	All	0.963	0.895	0.997
Phase II	1996+ Summertime	All	0.890	0.890	0.890
	1996+ Summertime	All	0.890	0.890	0.890